

PRACTICAL
INSTRUMENTATION

BY

RICHARD HOFMANN.

TRANSLATED BY

ROBIN H. LEGGE.



PART IV.

THE HORNS.



LONDON
AUGENER & C^o.



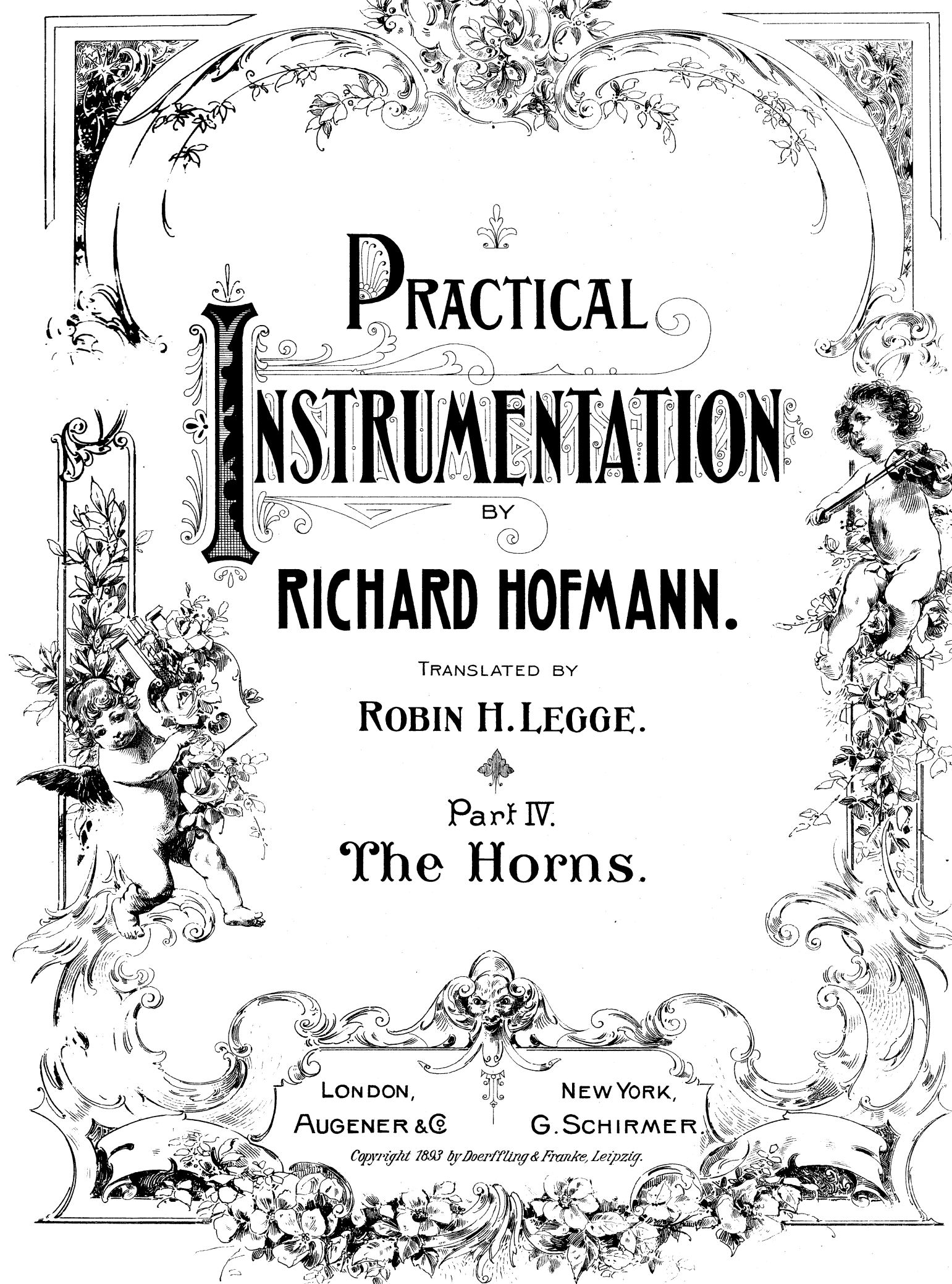
NEW YORK
G. SCHIRMER.

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Sole Agents for The United States and Dominion of Canada

The Boston Music Company

26 & 28 West Street Boston, Massachusetts



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PART IV.

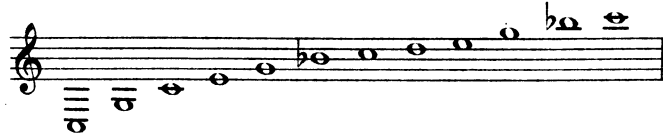
The Horns.

The Wald- and Ventil-horn, the Valve-horn, the Alto- and Tenor-horns.

The Wald- and Ventil-horn.

The wald- and ventil-horn, or, briefly, the horn — the oldest of the horn family — which plays an important rôle in the orchestra, has hitherto been regarded as impossible to replace; therefore let us describe it first. In all other text-books of instrumentation a special description has been deemed necessary of both the wald- and the ventil-horns, but since nowadays wald-horns without ventils are rarely met with, we attempt here to combine the two; every ventil-horn can also be used as a wald-horn although they differ in tone, the latter being superior. It is, however, necessary, or at least profitable for every musician to study the capabilities and treatment of the once-used wald-horn.

Music for the horn is written in the violin clef, though the bass clef is also used for the deeper notes. On every brass instrument are a certain number of natural tones produced by means of the players' lips. Thus the following notes can be played upon any horn, and are at the same time the compass of the wald-horn.



With these notes and a few more stopped notes — of which more later — the older masters had to content themselves. In order to perform these in any key, crooks were used whereby the tube of the horn was lengthened or shortened according to the pitch. By this means the following keys and notes might be produced.

Table of Notes playable on the Natural- or Wald-horn.

Notation.	Horn in C alto.	in B \flat alto.	in B \flat alto.	in A alto.
Real Sound.				
	in A \flat .	in G.	in F \sharp or G \flat .	in F.
	in E.	in E \flat .	in D.	in C \sharp .
	in C basso.	in B basso.	in B \flat basso.	in A basso.

Horns in C, B \flat , B \flat , A alto and A \flat can also play the low B \flat .

No real crooks existed for the horns pitched thus: in $B\sharp_2$ alto, $F\sharp$ or $G\flat_2$, $C\sharp$ or $D\flat_2$, $B\flat_2$ and A basso, but the pitch was arrived at by placing a slide between the chief tube and the crook, and lengthening the draught with the crook, whereby the instrument was lowered a semi-tone in pitch. Thus also with horns in C and $B\flat_2$ alto, G , $F\sharp$, D , $C\sharp$ or $D\flat_2$, C , $B\flat_2$, $B\flat_2$ and A basso.

According to the above description the horn, with its various pitches (except, of course, the horn in C) belongs to the transposing instruments. In more recent times several of these pitches fell more or less into disuse, as horns in A basso, $B\flat_2$ basso, $C\sharp$, $F\sharp$ and C alto; and nowadays horns in $B\flat_2$ basso, C , D , $E\flat_2$, E , G , $A\flat_2$ and $B\flat_2$ alto are disregarded if not entirely by composers, at least by players. Of this more anon.

In order to produce the notes between the open and natural tones, the right hand — open, but with the fingers close together — is introduced $\frac{1}{2}$ way, $\frac{1}{3}$ or more into the bell. Various effects are obviously obtainable thus.



Half-stopped tones sound dull, 'stuffed'; those $\frac{2}{3}$ stopped' colourless and flat. In former days whole and $\frac{2}{3}$ stopped notes were not used in the orchestra, except perhaps in rare cases or for some very especial effect. (cf. later.)

Through the invention and introduction of valves to the brass instruments (horns etc.) much more freedom accrued to composers; the uneven tone of former days is vanished, for the tone, produced now with the aid of the valves instead of the hand, is tolerably similar to that of the natural horn — nevertheless the tone of the valve horn is slightly inferior to that of the other — a fact there is no denying. By pressing down the valves the air blown into the instrument must wander through small side channels, as it were, which checks the free stream of air; but this check occurs not so much through the curves of the instrument as through the valves. Every easily depressed valve cannot close hermetically, wherefore the air-pressure becomes slightly less as soon as it streams through the valve.

Many horn-players can produce from the valve horn precisely similar toned notes as the open notes of the natural horn; but all must not be credited with this capability.

At the present time it is almost impossible to dispense with the valve horn since it is practically necessitated by modern harmony and modulations. The brass instruments too, are (unfortunately) used so powerfully now.

By means of the valves the following tones can be produced from the valve-horn.



This table shows the possible compass of the valve-horn; and so it may be believed that, the horn possessing so great a compass, no other pitch is required, and the instrument can be used orchestrally for almost any passage. But there is some variation in the character of tone in almost every pitch, and the tone-colour does not commend itself to every use. Before proceeding to discuss a few characteristic passages for horns from the works of the masters, the following table should be studied, as it will be useful in the exercises later.

We divide the pitch of the horns into deep, medium and high: the deep being the horns in B basso, C and D ; the medium those in $E\flat_2$, E and F ; the high in G , $A\flat_2$, A and B alto.

*) The notes marked * are not of very good tone.

Table of the various pitch for Valve-horns (with compass and actual sound).

The passages in brackets show the most effective registers for horns.

Actual sound.

Corno in B₂ basso.

Corno in C. Deep pitch.

in D.

in E_b. Medium pitch.

in E.

in F.

in G. very diffic.

in A_b. High pitch. very diffic.

in A. very diffic.

in B₇ alto. very diffic.

Actual sound.

The half-notes (minims) are open or natural tones.

The B₂ basso horn has a full, powerful tone, as also has that in C though rather harsher. The tone of the horn in D is full, but more tender than that of the deep horn in B₂ and C; the E_b approaches in tone the D-horn, but is not so veiled. The E-horn has a clear, tender and full tone and resembles that of the F-horn, which is noble and soft and surpasses all the others in tone-colour. (This must not be understood to mean that the F-horn should always be used in the orchestra.) The high G-horn has a rather sharp, penetrating tone, whereas that of the A_b-horn is pleasanter. The tone of the high A-horn, which resembles in character that of the G-horn, is again rather penetrating; but the B₇-horn is the hardest and sharpest of the three already-mentioned horns, yet is of a somewhat 'depressed' tone. For the tone-effects of these horns the student is referred to the examples of the various horn solos which are given later in this book.

* The small bracket at either end of the compass of the horns denotes the tones which are rather difficult to play.

What can a player perform on the horn? Every note in the foregoing table can be played in all shades of tone, short or long; and \leftarrow or \rightarrow thus



Frequently the following signs occur in the horn-part of a score: *fp*, *ppp* or even *pppp*. *fp* can only be played when a slight pause occurs between the *f* and the *p*. The grades *ppp* and *pppp* are impossible for the hornist. It is sufficient for a brass-instrument player to write the grades between *pp* and *ff*.





How long a time a player can sustain a note without drawing breath cannot be settled definitely, since the deeper notes require more breath than the higher, and the higher demand more strength of lip. On the horns of deep pitch it is easier to produce the higher than the deeper notes, and the reverse with the higher-pitched horns. Music written for horns should be phrased — so far as regards breath-taking — precisely as if written for a singer. Every hornist should know how to dissect any musical phrase without disturbing the whole passage in performance by irregular breathing. It is very necessary to mark the correct phrasing in horn solos.

Staccato — the repetition of a tone slowly or rapidly — is playable diatonically or chromatically or in successions of chords on a horn: thus



All kinds of rhythmic figures are also playable, thus



But rapid *staccato* or a lengthy repetition of a tone is very difficult on horns of lower or middle pitch above  and below;  and on the higher horns above  and below .

Diatonic and chromatic scales in any quantity can be played *staccato* or *legato*, or mixed, as in the following example. Thirds 5^{ths}, 6^{ths}, also can be easily played. Thus



*) These tones are very difficult to play in this manner.

**) see p. 3.

Wider intervals, as 7^{ths}, 8^{ves}, 9^{ths}, 10^{ths} etc., are not difficult in slow tempo and when not in too deep or too high a register; but in rapid tempo they are somewhat difficult. For example

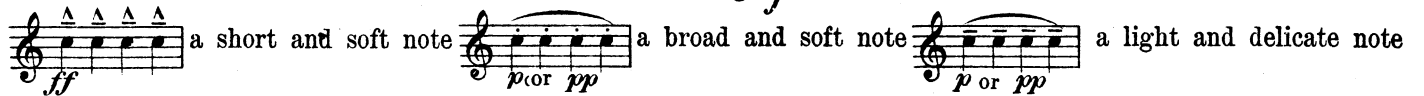


8th notes, triplets and 16th notes (*staccato*) on one tone or in slow progression are both difficult and exhausting to play in rapid tempo and especially in a passage of long duration, if the player attempts the usual method — by the syllable 'ta'. An experienced player produces a rapid repetition of one and the same note by double-tongueing, and blows (by means of the tongue) the syllables 'ti-ke-ton' or 'ka-te-ton' into the instrument according to the demands of the rhythmic figure. Thus the following figures would be played thus:



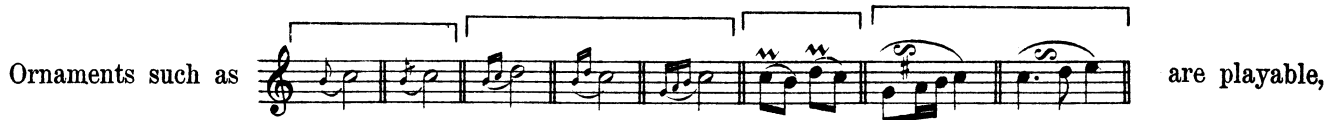
This cannot be used, however, in diatonic and chord progressions.

To obtain a short, firm note the music is marked thus a broader and more powerful note thus



is marked with dots over the music in *p* or *f*.

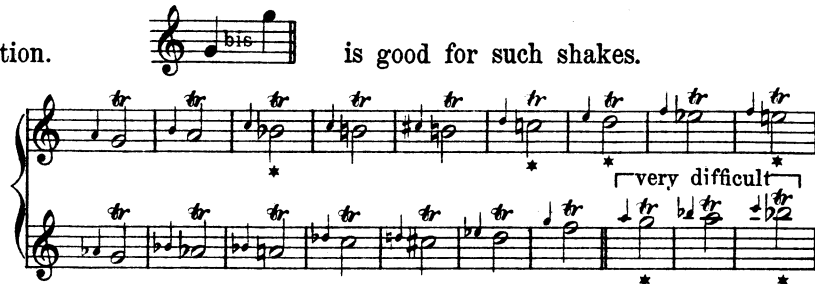
The usual signs for performance which are already known in the case of other instruments are used here also.



as also are some shakes with a major or minor second, but care must be exercised that these are not made use of in too high or too low a position. is good for such shakes.

The following shakes are easy.

These more difficult.



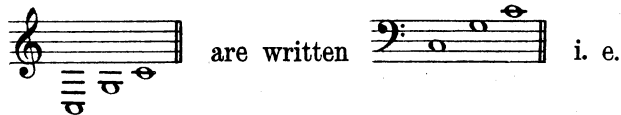
Those marked * are the most effective, but also the most difficult; they may be performed with the help of natural tones.

Use of the Bass-Clef for the deep notes of the Horn.

As already mentioned, some notes for horns are written in the bass-clef — notably these written thus In this — the old-notation — the deepest natural note C does not occur on all horns, which of course are transposing instruments. On the high B \flat -horn (or B \flat alto) this note C gives a 7th, on the A-horn a small 6th, A \flat -horn a major 6th, G-horn a 5th, F-horn a 4th, E-horn a major 3rd, E \flat -horn a minor 3rd, D-horn a major second *higher*, C-horn basso sounds as written, and B \flat basso a whole tone deeper. Thus:



Nowadays the following method is used; thus these notes



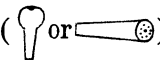
an octave higher than formerly; and here, again, is the system of reading music for the horns:



In the following examples in score the first-described method of writing will frequently be found.

I do not think it indispensable to use the bass-clef for horns, since the deep notes are rarely used in rapid passages; but it is necessary to describe the two methods of writing for the sake of clearness.

Con Sordini.

The mute or sordino, made from paste-board or leather, is pear-shaped in form () and having a small opening or perforated bottom; it is inserted into the bell. The mute causes the tone to be weak, but mysterious, and as if coming from a distance. It is used to give the effect of an echo. Weber has used it with great effect in his clarinet concerto. (Cf. Ex. in Score, pt. IV.) Although it is possible to produce a certain strength of tone from the muted horn, it is not used *f* or *ff*; the effect is good *ppp*. Music intended to be played *con sordino* should have these words written over the notes, and when the mute is to be removed, *senza sordino*.

Stopped Tones.

In modern compositions one often finds the words 'stopped tone' or a + over the notes for horn, when a dull, 'depressed' tone is required. Notes thus described have in *p* and *pp* a certain relationship, but they are not invariably as tender as those when a mute is used. However, they do not serve the same purpose as those of the muted horn, but in *p* and *mf* their tone-colour is dark and melancholy, while *f* or *ff* it suggests fear. Notes described as 'stopped' or having the + above them are playable on both the natural and the ventral-horns, and are especially effective in the best horn registers. (Cf. pt. V).

Generally speaking the tone of the horn is noble and tender, yet the instrument is used in all kinds of music, even in that of a joyous character. It submits, in fact, to every mood of life, and the masters have used it to express joy, gaiety, pain, sadness. Its power of and capacity for expression is the greatest of all and the most varied among metal instruments. (Cf. Examples).

In compositions, of whatsoever kind, the horn is used for solos, rarely for decorative purposes, for accompanying and to fill in the harmony, as will be seen in the examples later. The following most effective and beautiful solos for horn are in different pitches and for one or more horns; here the student may see the effect of the varieties of pitch. Unfortunately composers often misuse the pitch, horns in *Eb*, *D*, *C* and deep *Bb* being far less used than these in *E*, *F*, *G*, *Ab*, *A* and high *Bb*, because the players usually transpose parts for the former on the *F*-horn, so that the desired tone-colour is lost.

The horn as an obligato instrument — alone or with other instruments:

1. **Kreutzer, 'Das Nachtlager'.**
Andante maestoso.
Corno in D. *espress.* *sf*

2. **Beethoven, Symphony No. 9.**
Allegro ma non troppo.
in D. *p*

3. **Weber, overture 'Oberon'.**
Adagio.
in D.

4. **Weber, 'Oberon', Act III, Finale.**
Allegro.
in D. *f* *legg.*

5. **Boildieu, Aria 'Dame blanche'.**
Andante con moto.
in E \flat . *p dolce* *tr*

6. **Beethoven, Symphony 'Eroica', movement IV.**
Poco Andante.
in E \flat . *f* *sf*

7. **Beethoven, 'Octett', Ser. 8, No. 59, movement I.**
Allegro.
in E \flat . *p* *f* *ff*

Until recently it was understood that Beethoven had only made use of wald-horns — (without ventils); but this cannot have been the case, for we find (1) the low *G* (not playable on the wald-horn); (2) Beethoven never used long successions of tones in a key with many sharps or flats as the signature. Oral tradition has it that at the time of Beethoven, Levi a fourth-horn player in Vienna possessed a recently discovered ventil-horn; on the ground of this discovery it was imagined that all horn passages could be played with equal quality of tone. Probably for this reason Beethoven (who could scarcely have heard it himself in his greater and later works) wrote the difficult passage for the 4th horn in E \flat . The whole part lies badly for the player, and in view of the tone there seems no doubt that the second half of the solo is better on an *E*-horn. The following shows the passage in the original and how it is played by 2 horns; 3 in *E* and 4 in E \flat , wherein the part is not only easier and safer, but in quality of tone.

8. **Beethoven, Symphony No. 9, movement II.**
Adagio.

Original.
Corno IV in E \flat .

Transcription
for Cor. III. IV.
Cor. IV in E \flat .

Corno III in E.

9. **Weber, Overture 'Preciosa'.**
Andante con moto.
in C. *mf*

10. **Rossini, 'Die diebische Elster', cavatina.**
Andante.
in E.

11. **Beethoven, overture 'Fidelio'**
Allegro.
in E. *p dolce*

12. Mendelssohn, 'Midsummer Night's Dream', notturmo.
Andante tranquillo.
in E. *p dolce*

13. Spontini, 'Die Vestalin'.
Larghetto.
in F. *p*

14. Beethoven, 'Symphony pastorale'.
Allegretto.
in F. *p* *cresc.*

15. Beethoven, 'Symphony pastorale'.
Minuetto. Allegro.
in F. *p dolce* *cresc.*

16. Beethoven, 'Ruins of Athens'.
Adagio.
in F. *fp*

17. Wagner, 'Siegfried'.
Mässig bewegt.
in F. *p* *lustig^a* *cresc.* *sehr schnell und schmetternd*
ff *ff* *p* *cresc.* *b* *c* *ffd*

The above horn-solo (17) is so far unpractical in that the higher tones of the two last bars are not only very difficult, but are not of good effect. The passage in easier' safer, and more effective if the high B \flat horn is

used; it would be written thus: 

18. Rossini, Overture 'Barbier von Sevilla'.
Allegro.
in G. *p*

19. Rossini, 'Wilhelm Tell'.
a) Allegretto. *mf* *3*
b) Allegro con brio.
in G. *p*

20. Haydn, G major symphony, movement IV. Edition Peters' No. 9.
a) Presto. *p*
b) Presto. *p* *)

21. Marschner, Overture 'Der Vampyr'.
Allegro. *dolce*
in A. *dolce*

Cf. horn entering as solo instrument in Ex., in Score, pt. IV and V.

2 Horns.

1. Mozart, Aria 'Figaros Hochzeit'.it'
Allegro vivace.
Corni in Es. *f* in E.

2. Beethoven, Overture 'Fidelio'.
Andante.
in E. *f*

3. Beethoven, Symphony No. 2, D-major, movement II.
a) Larghetto. *p* (difficult)
b) in A. *p*

4. Weber, 'Freischütz'.
Bauernmarsch.
in G. *f*

*) Might be written *g* (sounding *d*), for Haydn never used stopped notes in the deep register.

5. Beethoven, Symphony No. 8, F.

a) Tempo di Minuetto.

in F.

b)

6. Schubert, Symphony C, movement I.

Andante.

in C.

7. Beethoven, Symphony A.

Vivace.

in A.

8. Mozart, Symphony G.

Menuetto.

in G.

9. Beethoven, Symphony C.-moll.

Allegro.

in C.

10. Beethoven. Violin-concerto, movement III.

Allegro.

in D.

11. Beethoven, Symphony No. 9, D.

Adagio molto e cantabile.

Cf. also use of 2 horns, pt. V. Ex. 14, 41, 46. in B \flat basso.

3 Horns.

1. Rob. Schumann, Symphony No. 3, E \flat .

Feierlich.

Corni I. II. in E \flat .

Corno III. in E \flat .

2. Beethoven, Symphony 'Eroica'.

Allegro vivace.

Corni I. II. in E \flat .

Corno III. in E \flat .

3. Beethoven, Aria 'Fidelio'.

a) Allegro.

Corni I. II. in E.

Corno III. in E.

b)

1. Rossini, 'Tell'.
Allegro.

Corni I. II. in E.
Corni III. IV. in E.

2. Schmidt, Overt. Prinz Eugen'.
Allegro assai.

Corni I. II. in E.
Corni III. IV. in E.

3. Meyerbeer, Polonaise from Struensee.

Corni I. II. in D.
Corno III. in D.
Corno IV. in A.

4. Schumann, Overture 'Genoveva'.

Corni I. II. in E \flat .
Corni III. IV. in E \flat .

See also Score-Ex. pt. V. de Theil V.

From all these examples it may be seen how the masters used to write effectively for horns.

In the small orchestra 2 horns only are used as a rule; in the full orchestra 4 or more are found: it may be taken for granted that in any respectable orchestra four horns will be found. The 'old' masters (Handel in *Giulio Cesare* and Mozart in *Idomeneo*) used 2 horns generally: Beethoven uses 2, 3 and 4; modern composers 6 and even 8 or more, especially in opera. These latter however usually achieve less of musical value thus than the other masters with 2 horns.

It is doubtful if 9, 12 or 16 horns have ever been used.

In the score horns follow the bassoons (though there are some exceptions), two being written for on the same staff, unless of course 2, 3, 4 or more horns of different pitch are used, when each must have its own staff.

Which pitches may and should the composer use? When 2 horns are employed that pitch may be selected 1) which is similar to the key of the piece, e. g. when the key is C, horns in C, and so on; 2) the pitch of the sub-dominant, thus, for a piece in C, F-horns etc.; 3) the dominant, thus for a piece in C, G-horns. If the piece is written in a key for which no suitable pitch exists, one must be selected which bears a near relationship to the key, and in which occur as many open or natural tones as possible; thus: in B major, E-horns; in F \sharp or G \flat , E, E \flat or A \flat -horns etc.

From the following tables may be seen the relationship referred to.

C scale. **)		G \flat or F \sharp scale.	
Corno in G. Dominant.	12 open tones.	Corno in A \flat .	7 open tones.
Corno in F. Dominant.	10 open tones.	Corno in E \flat .	8 open tones.
Corno in C. (Original-key.)	9 open tones.	Corno in B \flat basso.	10 open tones.

*) Some composers prefer to write the horns before bassoons; I think it preferable not to separate the wood-wind in the score.

***) In the keys F, B \flat , E \flat , D, A and E the number of open tones in the original key, the dominant and subdominant is the same or in the already explained C-major scale.

D-minor scale.

Corno in A \flat Dominant. 9 open tones.

Corno in E \flat 9 open tones.

Corno in F. 9 open tones.

A scale.

Corno in A. Original-key. 10 open tones.

Corno in E. Dominant. 11 open tones.

Corno in D. Sub dominant. 10 open tones.

A \flat scale, horn in A \flat 10 natural tones, in E \flat 10, in B \flat basso or alto 10, in F 8; in B horn in E 10, in A \flat 8, in E \flat 6.

In pieces in a minor key when 2 horns are employed sometimes other crooks are used than in major keys. In such a case the horns must again be selected with a view to the natural tones; the following table will be of service in determining this:

E-minor scale.

Corno in E. 8 open tones.

Corno in A. 8 open tones.

**Corno in G. 7 open tones.

B-minor scale.

Corno in D. 7 open tones.

Corno in E. 9 open tones.

Corno in G. 9 open tones.

F \sharp -minor scale.

Corno in A. 8 open tones.

Corno in E. 8 open tones.

Corno in D. 9 open tones.

A-minor scale.

Corno in A. 8 open tones.

Corno in E. 11 open tones.

Corno in D. 8 open tones.

Corno in C. 7 open tones.

***) 8 natural tones occur on the horn in C in the E minor scale.

D \flat scale. *G*-minor scale.

In the *E*-*mi* scale the natural tones are as follows: horn in *E* 9, in *A* 8, in *G* 7. Therefore the *E*-horn is preferable when 2 horns are used in *E*-*mi*, though in view of many modulations the *G*- or *A*-horns may be more practicable.

Key <i>C</i> \sharp -minor, <i>A</i> horn 11.	Key <i>G</i> \sharp -minor, <i>E</i> horn 9.	Key <i>C</i> -minor, <i>F</i> horn 9.
" " <i>A</i> horn 10.	" " <i>A</i> horn 8.	" " <i>A</i> \flat horn 9.
" " <i>E</i> horn 6.	" " <i>E</i> \flat horn 8.	" " <i>E</i> \flat horn 8.
		" " <i>C</i> horn 8.
Key <i>F</i> -minor, <i>C</i> horn 9.	Key <i>B</i> -minor, <i>F</i> horn 11.	
" " <i>B</i> ^{basso} _{or alto} horn 9.	" " <i>E</i> \flat horn 9.	
" " <i>F</i> horn 8.	" " <i>B</i> horn 7.	
" " <i>A</i> \flat horn 6.		basso or alto.

Haydn, Farewell symphony, 1st and last movements *F* \sharp -*mi*. *A*- and *E*-horns.

Mozart, *G*-*mi* symphony, 1st and last movements *G*-*mi*. *G*- and *B* \flat -basso horns.

When two horns are used the parts should not be widely separate, though exceptions occur.

Cf. **Beethoven**, 'Fidelio' Overture, *A*-symphony. 9th symphony.

Weber, 'Freischütz' Overture, horns 3 and 4, later 1 and 2.

During the progress of a piece the pitch of a horn may be changed for any length of time; but before the change is required several bars rest must be allowed in which to make the change. Such changes usually occur when the piece passes into a remote key and remains there for some time. Modern composers occasionally notify this change during the actual performance, but only very efficient hornists should be asked to do this. All composers should have some practical acquaintance with orchestral instruments. For the use of change of key cf. **Beethoven**, 'Eroica' Symphony, 1st movement. Horn in *E* \flat , then *F*, then *E* \flat again.

When 3 and 4 or more horns are used the choice of their pitch is decided in the same way as before; horns 3 and 4 are in the original major key.

Beethoven, 'Eroica' Symphony. (Scherzo.) 3 horns in *E* \flat ; cf. Ex. p. 9.

It may happen when 3 and 4 horns are used that two different pitches are employed:

Cf. **Méhul**, 'Henry IV.', horns 1 and 2 in *D*, 3 in *A*.

Weber, 'Freischütz', horns 1, 2, 3 in *D*, 4 in *A*.

" 'Euryanthe', horns 1 and 2 in *E* \flat , 3 and 4 in *B* \flat -basso.

Meyerbeer, Polonaise from 'Struensee', No. 8, horns 1, 2, 3 in *D*, 4 in *A* \flat .

" 'Robert le Diable', horns 1, 2 and 3 in *C*, 4 in *G*.

Marschner, 'Der Templer', 5 horns, 1 in *A*, 2-5 in *E*.

3 different pitches may be employed, as *B* \flat -alto, *F*- and *B* \flat -basso.

B \flat -alto, *A* \flat and *E* \flat .

A, *G* and *D*.

Four horns at the same pitch are frequently met with both independently treated and in combination with other instruments.

- Cf. Part IV. **Wagner**, 'Rhinégold'. 4 horns in *E*.
 " " " **Kreutzer**, 'Das Nachtlager von Granada'. 4 horns in *F*.
 " " " **Weber**, 'Preciosa'. 4 horns in *E*.
 " " " **Wagner**, 'Tristan und Isolde'. 4 horns in *E*.
 " " " **Rossini**, 'Tell'. 4 horns in *E*.
 " " " **Schumann**, 'Genoveva' overture. 4 horns in *E* \flat .

Four horns may also be used at two pitches, so that horns 1 and 2 are in the tonic key, horns 3 and 4 in the dominant.

- Cf. **Weber**, overture 'Freischütz'. Allegro *C*-mi, horns 1 and 2 in *C*, horns 3 and 4 in *G*.
 " 'Oberon' *D*, horns 1 and 2 in *D*, horns 3 and 4 in *A*.
 " 'Euryanthe' *E* \flat , horns 1 and 2 in *E* \flat , horns 3 and 4 in *B* \flat -alto.
 " 'Freischütz', Hunters' chorus *E* \flat , horns 1 and 2 in *E* \flat , horns 3 and 4 in *B* \flat -basso.

Cherubini, in his overture, 'Les Abencerages' *D*-major, has written for horns 1 and 2 in *D*, horns 3 and 4 in the subdominant *G*.

The higher pitches are sometimes written for the 3rd and 4th horns and also for the 1st and 2nd horns.

In pieces in a minor key, the 4 horns may be thus divided: horns 1 and 2 in the principal key, horns 3 and 4 in that of the upper 3rd or mediant. Thus:

- Spontini**, overture 'La Vestale', *D*-mi, horns 1 and 2 in *D*, horns 3 and 4 in *F*.
Rossini, 'Tell'. *E*-mi, horns 1 and 2 in *E*, horns 3 and 4 in *G*.

The following arrangements may also occur: *E*-mi, 2 horns in *E*, 2 in *A* or *G*; *A*-mi, 2 horns in *E* and 2 in *A* or *D*; *D*-mi, 2 horns in *D* and 2 in *A* or *G*; *C*-mi, 2 horns in *C* or *D*, and 2 in *B* \flat -alto or *B* \flat -basso; *C*-mi, 2 horns in *C* or *E* \flat , and 2 in *F* or *A* \flat ; *F*-mi, 2 horns in *B* \flat -basso or *C*, and 2 in *B* \flat -alto or *A* \flat ; *B* \flat -mi, 2 horns in *F* or *E* \flat , and 2 in *B* \flat , alto or *B* \flat -basso.

As already remarked the pitch of horns may be altered during performance; this may also be effected when 4 or more horns are used, according to the modulations and the character of the piece.

The 4 horns may be differently combined, again, when the piece is written in a key for which no crook exists. In such a case that pitch should be selected in which the horns are most closely related (by open tones) to the original key. Thus *B*-mi, 2 horns in *E*, and 2 in *G* or *D*; *F* \sharp -mi, 2 horns in *D* and 2 in *E* or *A*; *C* \sharp -mi, 2 horns in *A* \flat and 2 in *A* or *E*; *G* \sharp -mi, 2 horns in *E* and 2 in *E* \flat or *A* \flat .

Horns may also be arranged thus:

- Weber**, Freischütz ('Die wilde Jagd'), horn 1 in *B* \flat -alto, 2 in *F*, 3 and 4 in *E*.
 " " ('Hunters' chor.), horns 1 and 2 in *D*, 3 in *A*, 4 in *D*.
Auber, 'Masaniello', horn 1 in *E* \flat , 2 in *F*, 3 in *B* \flat -alto, 4 in *F*.
Meyerbeer, 'Dinorah', Entr'acte, horn 1 in *F*, 2 and 3 in *C*, 4 in *F*.
 " 'Robert', ballade, horns 1 and 2 in *C*, 3 in *G*, 4 in *C*.
 " 'Polonaise', horns 1, 2 and 3 in *D*, 4 in *A*.
Marschner, 'Templer', introduction, horn 1 in *A*, 2 and 3 in *E*, 4 and 5 in *E*.
Hummel, Pianoforte-Concerto op. 89, horns 1, 2 and 3 in *G*, 4 in *D*.
Wagner, 'Flying Dutchman', horns 1 and 2 in *G*, 3 and 4 in *E* \flat .
 " 'Meistersinger', horns 1 and 2 in *F*, 3 and 4 in *D*.
 " " horns 1 and 2 in *E*, 3 and 4 in *D*.
 " " horns 1 and 2 in *G*, 3 and 4 in *F*.
 " 'Rhinégold', 8 horns in *E* \flat and in *F* also.
 " Götterdämmerung, horns 1 and 2 in *F*, 3 and 4 in *C*, 5 in *F*.

By studying all this carefully the student will have no difficulty in acquiring the art of writing in the most effective and practical manner for horns. From the foregoing combinations he will see how unevenly divided are the higher, medium and deep pitches among the players. My advice is to use horns 1 and 2 for the deep and medium pitch, 3 and 4 for the others, whereby the players find greater security in producing the tones because the distance between the various pitches is not so great. When a rapid change is made from a high to

a low pitch or vice versa the player must get accustomed to the new adjustment of his lips, while from medium to high, deep to medium, the change is not so noticeable.

The following tables show that on the 2 medium horns (*F* and *E*) 6 other pitches are called in to play by the depression of ventils. Thus the horn in *F* becomes *E* by depressing the 2nd ventil; *E* \flat , 1st ventil; 1, 2 or 3 = *D*-horn; 2 and 3 = *D* \flat or *C* \sharp ; 1 and 3 = *C*-basso; and 1, 2 and 3 = *B*-basso. Again, the *E*-horn used thus would be converted into a horn in *E* \flat , *D*, *C* \sharp or *D* \flat ; *C*, *B* or *B* \flat -basso. But it must be stated that when a horn is thus converted by the depression of the ventils it must be used only as a natural horn since the intervals between the open notes can only be created by 'stopping'. On the deeper pitched horns, *E* \flat , *D* and *C*, and the higher, *B* \flat -alto, *A*, *A* \flat and *G*, this experiment is risky, for with the first the tones are difficult to produce, and lack power and fullness, while with the latter the execution is easier, but the notes are difficult to produce in tune.

The following table (a) shows at a glance the pitches of the *F*-horn obtained by depressing the various ventils.

Table a.

Table a shows musical notation and actual sounds for various horn pitches achieved by depressing ventils on an *F*-horn and an *E* \flat -horn. The notation is split into two rows: 'Notation' and 'Actual sound'. The first row shows Corno in *F* (1. or 2. Ventil.), Corno in *E* (2. Ventil.), and Corno in *E* \flat (1. Ventil.). The second row shows Corno in *D* (1. and 2. or 3. Ventil.), Corno in *D* \flat or *C* \sharp (2. and 3. Ventil.), Corno in *C* basso (1. and 3. Ventil.), and Corno in *B* basso (1., 2. and 3. Ventil.).

Table (b) shows the notation and the actual sounds produced.

In making use of these prompt changes of pitch the music is always written in the key of *C*, adding above it the pitch required thus:

Table b. -

Table b shows musical notation and actual sounds for various horn pitches achieved by adding a pitch requirement above the notation. The notation is split into two rows: 'Notation' and 'Actual sound'. The first row shows Corno in *F* (in *E*, in *E* \flat , in *D*, in *D* \flat , in *C*, in *B*). The second row shows Corno in *F* (in *D* \flat , in *F*, Corno in *E*, in *C*). The third row shows Corni I-III in *F* (in *E*).

Such use of the ventils has the advantage of avoiding the necessity for changing the crook in the middle of a piece, since the same effect can be produced with the aid of the ventils.

The following example shows a small solo composed of open or natural tones (by the use of the ventils) and how the *F*-horn can be converted to the *E \flat* , *C* and back to *F*, pitch. I do not, however, advise such rapid changes of pitch in practice, but the manner of accomplishing them should be understood.

The musical score consists of four measures. The top staff is for the Corno, with the following pitch changes indicated above it: *in F.*, *in E \flat .*, *in C.*, and *in F.* Below the Corno staff, the notes are labeled: "open tones.", "Ventil 1.", "Ventil 2 and 3.", and "open." The second staff is labeled "Actual sound." and shows the resulting pitches. The third staff is for Violino I.II. Viola. and the fourth staff is for Violoncello & Contrabasso. The key signature is one flat (B \flat), and the time signature is common time (C).

Cf. Wagner, 'Siegfried', pt. IV. Score Ex. 36.

The above means are not used in this manner on *F*-, *E*- or high *B \flat* -, *A*-, *A \flat* - or *G*-horns by orchestral players, who now transpose if possible everything for *F*- or *E*-horn. But if in the course of a piece the *G*-, *A \flat* -, *A*- or *B \flat* -horn is required by the composer, and the horn part either lies fairly high or is of the first importance, they feel bound to use the pitch desired.

Unhappily very many of our contemporary composers have considered the comfort of hornists too greatly by writing all music for the *F*-horn. In military bands the use of one or two pitches (*F* or *E \flat*) is more or less necessitous, for the music they usually perform is very often in flat keys, and the finer colouring is hardly sought for to the same extent as with concert orchestras.

Orchestral brass should not be utilised only for the purpose of a *crescendo* or *forte*, but the particular characteristics of the instruments alone and in combination should be made use of.

Every young composer is advised to restrict himself to the pitches we have mentioned — *B \flat* -basso to *B \flat* -alto. Players will frequently raise an objection to this no doubt. The various defects and errors should be removed, and, as a fact, there is much room for musicians to effect improvements in the manufacture of instruments. Would it not be an advantage, at least in helping to obtain true intonation, if horns were made which should be used only for the middle and deeper registers, as the *F*-horn with *E*, *E \flat* , *D*, *C* and *B \flat* -basso crooks, and others for the higher registers, as *B \flat* -horn with *A*, *A \flat* , *G*, *F* and *E \flat* crooks? In the works of the older masters it is especially advisable to use natural horns: today the need of them is growing more and more obvious. Yet it could be remedied by concert and opera directors at a very small cost.

A few words about the other horns which are not used in our orchestras, may be of use and interest.

The 'Kent' Bugle,

a class of horn rarely met with in the orchestra, is shaped like a German military signal horn, and had several keys for producing the notes between the open tones. Music for it was written in the *G*-clef, and the instruments existed formerly in *E \flat* , *D*, *C*, *B* and *A*. It was much used in military and brass bands before the *E \flat* - and *B \flat* -cornet was invented, for playing the melody. In military bands it was generally found in *E \flat* and *B \flat* or *D* and *A*. The following was its compass etc.

The image shows a musical score for Kent bugle in five different keys: E \flat , D, C, B, and A. Each key is represented by a separate staff. The score is divided into three registers: 'deep register', 'middle register', and 'high register'. The 'high register' section is marked as 'very difficult' for E \flat and 'difficult' for the other keys. Below the five key staves is a staff labeled 'Actual sound' which shows the natural harmonic series of the instrument.

The deep register was reedy, the middle round and full, the high rather sharp in tone; nevertheless it was pleasanter than that of the present cornet.

The Bugle

is a cornet with 3 ventils, rather larger in shape and in the tube. Its tone is fuller than that of the cornet and nearer that of the waldhorn. It occurs in *A*, *B* and *C* and is written for in the *G*-clef, like the cornet à pistons in *A* and *B \flat* . It is only used (generally in pairs) in military bands, and in the key of *B \flat* for playing the melody.

For compass etc., cf. cornet in *B \flat* .

The Alto-Horn

is similar to the alto cornet in *E \flat* (q. v.).

The Tenor-Horn

occurs in form of a trumpet or small tuba with 3 ventils. Its tone is like that of the bugle or *B \flat* -cornet (an octave deeper). It is written for in the *G*-clef and is in *C*, *B \flat* or *A*, that in *B* being nearly always used; it occurs in military bands usually in pairs for all purposes. The following table shows its compass etc.

The image shows a musical score for Tenorhorn in three different positions: 'bad', 'deep position', and 'middle position'. Each position is represented by a separate staff. The 'high position' section is marked as 'difficult'. Below the three position staves is a staff labeled 'Actual sound' which shows the natural harmonic series of the instrument.

Exercise 1^a.

Choral for 3 part female choir arranged for 3 horns.

If the above notes have been duly digested and assimilated the student will have learnt how to work the following examples. First he must notice the compass of the melody, and transpose where necessary to suit the pitch etc. of the horns he has selected. The horns should be at first used which are in the key of the piece — thus in *C* for music in *C*; in *D* for the key of *D* etc., that the natural or open notes be made the most of. But this rule cannot always be followed.

Music for horns is always written in *C*, using, of course, accidentals where required. The signature of the key is, however often placed at the beginning of the horn passages. But since hornists are generally unused to playing in any other key than *C*, it is well to put in all accidentals as well as the signature; thus



Care should be taken that the horns are used as much as possible in keys having few accidentals.

<p>1. „Lobt Gott, ihr Christen. allzugl.“</p> <p>Soprano I.II. Original. 3-part female choir. Alto.</p> <p>Corni I.II. in A. 1^a</p> <p>Corno III. in G. **) *</p> <p>Corni I.II. in D. 1^b</p> <p>Corno III. in D.</p> <p>Corni I.II. in F. 1^c</p> <p>Corno III. in C.</p>	<p>2. „Herr wie du willst, so schicks.“</p> <p>Soprano I.II. Original.</p> <p>Alto.</p> <p>Corni I.II. in B♭alto. 2^a</p> <p>Corno III. in E♭. 2^b</p> <p>Corni I.II. in E♭. 2^c</p> <p>Corno III. in E♭.</p>	<p>3. „O Gott, du frommer Gott.“</p> <p>Soprano I.II. Original.</p> <p>Alto.</p> <p>Corni I.II. in B♭alto. 3^a</p> <p>Corno III. in E♭. 3^b</p> <p>Corni I.II. in F. 3^c</p> <p>Corno III. in B♭basso.</p>
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The above chorals could be equally well given by 3 male voices an octave lower. Now 3-part chorals should be arranged so that (as seen above Ex. 1^a, 2^a, 3^a) the horns sound at the same pitch as the female voices. This necessitates the use of the high pitch for the 2 upper parts. Although these might be played on the *F*- or *E*-horn, yet the notes are not only hard to produce, but also not of particularly good tone. The 3rd part can be played on a medium pitched horn, as seen in the examples, 1^a, 2^a, 3^a, of which sound bright and sharp.

In arranging a choral in the same register as the male voices, medium or deep pitched horns must be used — or both, as in 1^b, 2^b, 3^b, all of which sound tender if duller than the others because of the deeper pitch.

The three exercises 1^c, 2^c, 3^c show the choral arranged in the most advantageous position for horns, since there are several open or natural tones; yet on account of the high pitch I have preferred to use 2 *B♭*-alto horns. In 3^c 2 horns in *B♭*-alto might have been used for the upper parts since thus there would be more open tones, but the contrast in tone between the *B♭*-alto and *B♭*-basso horns is lost.

*) The small crotchets show the actual sound.
 **) The o show the open or natural tones.

Exercise 1^b.

The arrangement of a choral for 4 horns.

1. „Allein Gott in der Höh' sei Ehr.“		2. „Eine feste Burg ist unser Gott.“		3. „Wer nur den lieben Gott lässt walten.“	
Tenor I. II.		Tenor I. II.		Tenor I. II.	
Original. Male-choir.		Original.		Original.	
Bass I. II.		Bass I. II.		Bass I. II.	
Corni I. II. in F.		Corni I. II. in F.		Corni I. II. in E \flat .	
Corni III. IV. in F.		Corni III. IV. in F.		Corni III. IV. in E \flat .	
Corni I. II. in F.		Corni I. II. in F.		Corni I. II. in F.	
Corni III. IV. in C.		Cor. III. IV. in B \flat basso.		Corni III. IV. in C.	
Corni I. II. in F.		Corni I. II. in F.		Corni I. II. in F.	
Corni III. IV. in F.		Corni III. IV. in F.		Corni III. IV. in E \flat .	
Corni I. II. in G.		Corni I. II. in A.		Corni I. II. in A \flat .	
Corni III. IV. in D.		Corni III. IV. in E.		Corni III. IV. in F.	

*) The small crotchets de note the actual sound.

The passage for male-voices is generally in close position as also is that for 3 and 4 female voices. Medium horns (*E \flat , E, F*) and deep (*B \flat -basso, C* and *D*) have greater compass than the male-voices. The position of the horns used is similar to that of the male voices, and the translation of the latter for, or their strengthening by, 4 horns is easily managed.

Exs. 1^a, 2^a, 3^a, show the choral arranged for 4 horns in the same position etc. as the male-voices. In the 1st it was sought to cause the horns to play the actual notes of the male-voices, but this is ineffective for the horns. Of the 3 arrangements 2^a is the best, followed in order by 3^a and 1^a.

In Exs. 1^b, 2^b, 3^b the choral is arranged for 2 pairs of different pitched horns. Each example sounds full if rather dark and dull, 2^b and 3^b especially so, a fact due to the rather low pitch.

Exs. 1^c, 2^c, 3^c are much more effective than the preceding and the charactor of the tone is fresh and bright, due to the advantageous position of the horn parts.

In Exs. 1^d, 2^d, 3^d, the choral sounds bright and sharp because of the high and medium pitch.

Exercise 1^c.

A male-chorus arranged for 4 horns at the same pitch.

Mendelssohn, 'Der Jäger Abschied'.

This melody is transcribed for 4 horns in *E♭* — the original key — and sounds thus similar to the male-voices themselves. The horns here are very effective because the original lies well for them.

If a rather milder and fuller quality of tone is required 4 horns in *D* or *C* may be used; brighter, horns in *E* or *F*. But horns in *G*, *A♯* or *A* would not be so effective.

*) The small notes denote the actual sound.

Cf. the following works for combination of horns and male-voices.

- Schumann, op. 137.
- Sturm, op. 5.
- A. Horn, op. 26.
- Goldmark, op. 15: all of which are for male-voices and 4 horns.

In the following trombones are also used.

- Mendelssohn, op. 50.
- Reinecke, op. 90 — 4 horns and bass-trombones.
- F. Schubert, Chorus of Spirits from 'Rosamunde', 3 horns and 3 trombones.
- F. Schubert, 'Nachtgesang' — male-chorus, und 4 horns.

Exercise 1^d

The same but in extended position.

The above chorals — except 1^b, 2^b, 3^b — have been arranged for 2 or 3 different horns, in order to make them more effective in extended harmony.

NB. The ♯ in the above are the added part and help to elucidate 1^e.

*) The ♯ show the actual sound.

Ex. 1^a, 2^a, 3^a sound in the same key and position as the original. The combination of the high and medium or deep pitch produces a rather hard and sharp tone, while, on the other hand a full and even noble and solemn colour is the result of the medium and deep pitch, and of the 3 pitches.

Ex. 1^b, 2^b, 3^b for 4 similar horns show the choral in various tone-colours. 1^b is mild in *D*, but full; 2^b is rather harder, in *B♭*; 3^b, in *E♭* would be better for more open tones. Unfortunately it was impossible to select a key with fewer accidentals because of the compass and pitch.

Ex. 1^c, 2^c, 3^c 3 varieties of horns are used, chosen to obtain open tones. 1^c in *G* is rather sharp-sounding because of the 3 *G*-horns; the 2nd horn might also be in *G*, but with the loss of several open tones.

Ex. 2^c in *E♭*, is not so sharp and bright as the foregoing; by adding the 2nd horn in *E♭* the tone is milder yet fuller.

Ex. 3^c in *F*, the three registers are used and produce a noble, solemn effect.

Exercise 1^c.

Choral for 5 horns.

„Herr wie du willst:“
1^d

Corno I. II. in F.
Corno III. in C.
Corno IV. V. in C.

Added part.

1^c Sopr. Sopr.
Corno I. II. in F.
Corno III. in C.
Corno IV. V. in C.

Alt. Füllst.
Tenn. Tenn.
Bass. Bass.

„Ach bleib mit deiner Gnade:“
2^d

Corno I. in B♭ alto.
Corno II. III. in F.
Corno IV. V. in F.

Added part.

2^c Sopr. Sopr.
Corno I. II. in A♭.
Corno III. IV. in E♭.
Corno V. in E♭.

Basso Alt. Tenn.
Added part. Bass.

„Werde munter, mein Gemüthe:“
3^d

Corno I. II. in A.
Corno III. in E.
Corno IV. V. in E.

Added part.

3^c Sopr. Sopr.
Corno I. in B♭ alto.
Corno II. III. in F.
Corno IV. in F.
Corno V. in B♭ basso.

Added part. Bass.

The above arrangements are similar to the preceding but with the addition of an added free part, which is shown in the previous examples by the small notes. In 1^d this is given to 3rd horn; in 2nd and 3rd, to the 4th horn. All 3 Ex. sound thick and full, 1^d 2^d, 3^d being the order in which they are most effective.

Ex. 1^c is slightly altered from 1^d. In bar 2, horn 2 takes the free part instead of the alto, the tenor, the free and alto, and the free part, the tenor. By thus crossing the parts the free part assumes a quieter character. 2^c shows the choral with different pitch and register from 2^d, and the effect is milder. 3^c is similar to 3^d but different pitches are used and several open tones accrue. The tone is like that of 3^c for 4 horns, but, of course, fuller.

(* The small notes here and drew here de note the reel sound.

Exercise I^f.

Secular choruses for 4 horns.

1. Mendelssohn, 'Entflieh' mit mir'.

Andante.

Sopran.
Alt.

Original.

Tenor.
Bass.

Ent-flieh' mit mir und sei mein Weib, und ruh' an meinem Herzen aus;

a) Andante.

Corni I. II.
in A.

Corni III. IV.
in E.

b) Andante.

Corni I. II.
in F.

Corni III. IV.
in F.

c) Andante.

Corni I. II.
in F.

Corni III. IV.
in C.

The above part-song by Mendelssohn is twice arranged for 4 horns at 2 pitches and once for 4 horns at the same pitch.

In Ex. a) horns of high and medium pitch are used, sounding like the original. The horns are advantageously chosen as may be seen by the number of open tones (marked \circ). The piece will sound clear.

Ex. b) is for 4 horns in *F*. Although all the parts are easily playable, yet the effect is not so good as that of c) since horns 3 and 4 in b) are in a deep register and require frequent use of the ventils.

2. Mendelssohn, 'O Thäler weit'.

Andante non lento.

Sopran.
Alt.

Original.

Tenor.
Bass.

O Thä-ler weit, o Hö-hen, o schöner grü-ner Wald, du

a) Andante non lento.

Corni I. II.
in B \flat alto.

Corni III. IV.
in E \flat .

b) Andante con moto.

Corni I. II.
in F.

Cor. III. IV.
in B \flat basso.

c) Andante con moto.

Corni I. II.
in E \flat .

Cor. III. IV.
in B \flat basso.

d) Andante con moto.

Corni I. II.
in F.

Corni III. IV.
in C.

2. Is arranged similarly to No. 1. In a) the 4 horn part is at the same pitch as the original, and by using 2 horns in B \flat alto the tone is sharp and clear. Exs. b, c, d are well arranged for medium and low horns, the last (d) being of the best effect.

But could this piece not have been arranged for 4 similar horns in (say) *F*, *E*, *E \flat* or *D*? Yes, this would have been possible, but the 4th horn part would have been too deep for easy intonation and the effect would have been correspondingly weak. A too frequent use of the ventils causes the tone to be rather poor.

Exercise II^a.

Arrangement of a song for horn solo with pianoforte accompaniment.

The following bars from a song by Feska in $A\flat$ can be played by the $A\flat$ -horn in C , but the effect would not be good. Better would it be for E -horn in G , or D -horn in G ; but best for F -horn whose effect would be brilliant. (Of course the accompaniment must be transposed according to the pitch of the horn).

A. Feska. „Im Frühling.“ (Opening bars 4—6.)

Original. *p*

Corno in F. *p*

Pianoforte. *p*

Es glänzt im A-bendson-nen-gol - - - de

Schubert's 'Ave Maria' might be played in $B\flat$ by a high $B\flat$ or C -horn, but the character of the $B\flat$ -horn is entirely different from that of the song. It could be given to the $E\flat$ -horn in C (accomp. in $E\flat$), or to F -horn in $B\flat$, but this would not be good because of the frequent necessary use of the ventils. And so, again, the F -horn is best.

Fr. Schubert. „Ave Maria.“ (Bars 3 and 4.)
Sehr langsam.

Original. *pp*

Corno in F. *pp*

Pianoforte. *pp*

A- - - ve Ma-ri - - - a!

If Schubert's 'Hark! the lark', in C , be arranged for horn in F , the accompaniment must be a 5th deeper, when this has a bad effect on the character of the song. Somewhat similar would it be for E -horn, the accomp. being in E , a 3rd higher than the original. But this again would not sound well, although effective enough for horn. Best of all would be to transpose it for the F -horn in G , and the accompaniment in C , where the sympathy between pianoforte and tenor is preserved.

Fr. Schubert. 'Hark! The lark.'
Allegretto.

Original. *p*

Corno in F. *p*

Pianoforte. *p*

Horch, horch die Lerch' im Ä-ther-blau und

Cf. also Schubert, 'Ich hört' ein Bächlein'.
Mozart, 'Dies Bildniss ist bezaubernd schön'.
Mendelssohn, 'Auf Flügeln des Gesanges'.
— 'Da lieg ich'.

Exercise II^b.

It is not so an easy matter to find among pianoforte as among choral music a piece suitable for arranging for horn solo with piano accompaniment, for discretion must be used in respect of both instruments, as to the practicability of the solo being played by the horn, and as to the occasionally necessary slight alterations, of the original. The following extracts from the works of Field and Mendelssohn are suitable, as also are Mendelssohn's 'Songs without words', op. 38, No. 13; op. 53, No. 19 and 20.

	John Field, "Nocturno N ^o 5." Cantabile.	Mendelssohn, 'Song without words No. 19.' (Bars 3-5.) Andante con moto.
Original. Pianoforte.		
Corno in F.		
Pianoforte.		

The following bars from a Beethoven sonata for horn and piano may serve as a pattern.

Beethoven, 'Sonata' op. 17. For horn and piano. Movement I.
Allegro moderato

Corno in F.	
Pianoforte.	

Movement I. (Close.)

Corno in F.	
Pianoforte.	

D. & F. 4

Beethoven, 'Sonata' op. 17. For horn and piano. Movement III.

Allegro moderato.

Corno in F.

Pianoforte.

Exercise II^c.

Arrange a song for horn solo with string accompaniment.

Mendelssohn's Venetian Gondola-song may be played by the *F*-horn in *B* minor with string accompaniment in *F* \sharp minor, as seen below. But this register is not the best for the horn because of the frequent use of the ventsils which it entails, and the accompaniment, moreover, sounds usually either too high or too low. If the original key be preserved (*F*-horn playing in *E* minor) the solo part has too little brilliancy, but the key is good so far as regards the accompaniment. The best arrangement would be to choose the *E*-horn in *A* minor, accompaniment in *C* \sharp minor, but since the *F*-horn is that most generally used, I give below a few bars arranged for that horn with accompaniment in *D* minor.

The original accompaniment must be slightly changed for the strings, but so that the change resembles the original as closely as possible. The 3 following styles may serve to show how this may be done. Such arrangements should be tried in various ways; the choice of pieces therefor is not very limited.

Mendelssohn's 'Gondola-Song'.

Allegretto non troppo.

Original. Voice and Pianoforte.

Violino I.

Violino II.

Viola.

Corno in F. Solo.

Violoncello.

Contrabasso.

Strings and Horns.

When strings and horns are combined in four parts the horns are used *a due* for alto and tenor, tenor and bass, or even soprano and bass; when there are 3 horns as alto, tenor and bass, or soprano, alto and tenor; and when 4, as alto, tenor, free and bass, or when one or two different horns occur — according to the compass of the horns — as soprano, alto, tenor and bass.

The strings can be written for here as in Part I (Ex. 1a and c), according to the required effect. When the horns play a 2, a 3, or a 4, and take alto, tenor, free and bass parts, it is advisable to make use of the deep or medium register; but if the horns play the choral (e. g.) in 4 parts the first, or 1 and 2 horns may be high.

Exercise III.

Arrange a choral as above.

It is hardly necessary to arrange pianoforte pieces for horns and strings. But glance at the following original compositions for these instruments and the examples in score.

- Mozart.** 'Notturmo'. (K. V. 286).
 — 'March'. (K. V. 248).
 — 'Peasant symphony'. (K. V. 522).
 — 'March'. (K. V. 445).
 — 'Divertimento'. (K. V. 334).

Beethoven's 'Sextet'.

Exercise in score.

1. Beethoven, Overture 'Fidelio'.
 Allegro.

2. Beethoven, E \flat symphony.
 Allegro con brio.

3. Brahms, D symphony.
 Immediately after the reprise of part I.

*) Would not this lovely horn solo sound even better and be easier to play on a horn in F.



4. Spohr, Overture 'Jesonda'.

Corno II in E \flat . Solo.

Violino I. Holzbl. pizz. *p*

Violino II. Holzbl. pizz. *p*

Viola. Fag. pizz. *p*

Violoncello & Contrabbasso. Cor. pizz. *p*

Musical score for Spohr's Overture 'Jesonda'. The score is in 3/4 time and E-flat major. It features five staves: Corno II in E-flat (Solo), Violino I (pizzicato), Violino II (pizzicato), Viola (Fagotto, pizzicato), and Violoncello & Contrabbasso (Corno, pizzicato). The dynamics are marked *p* throughout.

5. Boildieu, 'La Dame blanche'.

Andante con moto.

Corno I in E \flat . *p espress.*

Violino I. *p*

Violino II. *p*

Viola. *p*

Contrabbasso. *p*

Musical score for Boildieu's 'La Dame blanche'. The score is in 3/4 time and E-flat major. It features five staves: Corno I in E-flat (*p espress.*), Violino I (*p*), Violino II (*p*), Viola (*p*), and Contrabbasso (*p*). The tempo is marked 'Andante con moto'.

6. Flotow, Overture 'Martha'.

(By permission of Aug. Cranz, Hamburg.)

Corno I in E. Larhetto. Solo. *p espress.*

Violino I. *p*

Violino II. *p*

Viola. *p*

Violoncello & Contrabbasso. *p*

Musical score for Flotow's Overture 'Martha'. The score is in 3/8 time and E major. It features five staves: Corno I in E (Larhetto, Solo, *p espress.*), Violino I (*p*), Violino II (*p*), Viola (*p*), and Violoncello & Contrabbasso (*p*).

7. Beethoven, A symphony.

Corni in D. *p*

Violino I. *p*

Violino II. *p*

Viola. *p*

Violoncello & Contrabbasso. *p*

Clar. II. Fag. II. Contr. II.

sempre dim.

Musical score for Beethoven's A symphony. The score is in 3/4 time and E major. It features five staves: Corni in D (*p*), Violino I (*p*), Violino II (*p*), Viola (*p*), and Violoncello & Contrabbasso (*p*). The dynamics are marked *p* throughout. A second set of staves for Clarinet II, Fagotto II, and Contrabbasso II is shown on the left. The instruction *sempre dim.* is present above the strings.

* This must be played on a D-horn for that F 2 is not to be played by means of a ventil but by stopping, by which the character is different from that if played on an F or E-horn.

8. Gounod, 'Faust'.

Andante.

Corno I in E.

Arpa.

Violino I.

Viola.

Mephisto.

Violoncello.

End - lich!

Nun so schrei - - - be! Gieb

Faust.

Several horns accompanied by strings.

1. Goldmark, Symphony 'A country wedding'.

Moderato molto.

Corno I. in E♭.

Corni III. IV. in E♭.

Violoncello.

Contrabasso.

ten. ten. ten.

pizz. pizz.

Cf. horn soli: part V, pag. 6, 7, 15, 18, 20-23, 26, 30, 45, 47, 50. Part VI, pag. 73. Part VII, pag. 10, 27, 71.

2. Weber, Overture 'Freischütz'.

Adagio.

Corni I. II. in F.
Corni III. IV. in C.
Violino I.
Violino II.
Viola.
Violoncello.
Contrabasso.

mf

3. Kreutzer, Overture 'Das Nachtlager von Granada'.

Allegro.

Corni I. II. in F.
Corni III. IV. in F.
Violino I.
Violino II.
Viola.
Violoncello & Contrabasso.

4. Wagner, 'Tristan und Isolde'. Act III. (By permission of Breitkopf & Härtel, Leipzig.)
 Sehr ruhig und nicht schleppend.

5. Wagner, 'Rhine-gold'. (By permission of Schott's Söhne, Mainz.)

Exercise IV^a.

Of the use and combination of wood-wind and horns in 4 parts.

No. 1. This combination is only of good effect in music of a quiet character, for as the horns are rather prominent, it were better to allow the flutes to play *mf* and the horns *p*. No. 2 is not to be recommended because of the 2 complete contrasts. (Cf. Weber, 'Freischütz'. Ex. in score IV.) No. 3 is good. No. 4, 5 and 6 are happy combinations of colour. No. 4 is dark, 5 light, 6 mild and possible *f*. No. 7 is bright and mild and useable *pp*, *p* and *mf*. No. 8 soft, and not good *f*. No. 9 sharp yet soft, and does not combine so well. No. 10 can be used *p*, *mf*, the horn *pp*, while the other instruments and *p*, when the wood plays *mf*.

Exercise IV^b.

Combination of 5 instruments.

*) „Werde munter mein Gemüthe.“

All these examples are playable in any strength of tone. No. 1 is soft; No. 2 gentle; No. 3 bright and rather sharp; No. 4 soft and full; No. 5 not quite so good (better if 2 oboes, 1 bassoon and 2 horns); No. 6 tender and soft; No. 7 bright; No. 8 noble yet tender; No. 9 clear, sharp and rather hard.

Exercise IV^c.

6 Instruments.

„Ich weiss, mein Gott, dass all' mein Thun.“

1. Is bright and clear; 2. soften but fuller than 1; 3. is again brighter and sharper than 1; 4. happy and tender; 5. dark and gloomy; 6. soft yet rather bright; 7. full and powerful and rather darker than 6; 8. fresh and gay, mild yet full; 9. rather sharp and hard. Here the exercises have been regarded as *p* or *mf*; in *f* they would sound rather hard if full.

Exercise IV^d. 7 Instruments.

„Wie schön leuchtet der Morgenstern.“

Original.

<p>No 1.</p> <p>Flauto I. Clarineti in B\flat. Fagotti. Corno in E\flat.</p>	<p>No 2.</p> <p>Oboe I. Clarineti in B\flat. Fagotti. Corni in F.</p>	<p>No 3.</p> <p>Flauti. Clarineti in B\flat. Corni I. II. in E\flat. Corno III. in B\flat basso.</p>	<p>No 4.</p> <p>Flauto I. Clarineti in B\flat. Corni I. II. in F. Corni III. IV. in C.</p>
<p>No 5.</p> <p>Clarineti in B\flat. Fagotti. Corni I. II. in B\flat alto. Corni III. IV. in E\flat.</p>	<p>No 6.</p> <p>Flauto I. Oboe I. Clarinet. I. in B\flat. Fagotti. Corni in F.</p>	<p>No 7.</p> <p>Flauto I. Clarineti in A. Fagotti. Corno I. in G. Corno II. in D.</p>	<p>No 8.</p> <p>Flauto I. Oboe I. Clarineti in B\flat. Corni I. II. in F. Corno III. in F. Bass.</p>

1. Is tender and full; 2. has no added part, but 3 treble parts. The 1st horn treble moves between the alto and tenor, but the horn register here used combines well with the other trebles (oboe and clarinet), but is slightly prominent. In so comparatively weak a combination the doubled treble in the deep register is of no very good effect; 3. is clear, powerful and full; 4. rather softer; 5. dark; 6. the treble is again 3-fold, and sounds powerful although the sharp register of the oboe is slightly conered by the clarinets; 7. clear, soft and full; 8. is still clearer.

Exercise IV^e. 8 Instruments.

„Nun danket alle Gott.“

Original.

<p>No 1.</p> <p>Oboi. Clarineti in B\flat. Fagotti. Corni in F.</p>	<p>No 2.</p> <p>Flauti. Clarineti in B\flat. Fagotti. Corni in E\flat.</p>	<p>No 3.</p> <p>Oboi. Clarineti in A. Fagotti. Corni in D.</p>	<p>No 4.</p> <p>Flauto I. Clarineti in B\flat. Fagotti. Corni I. II. III. in B alto. Tenn.</p>
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*) The 2nd bassoon may play in unison with 2 horn if desired.

In a combination of 8 instruments the individual tone of each instrument is not so noticeable as before for the tone becomes, as it were, more general.

No. 1 soprano, alto, tenor in unison and bass in octaves produces here a solemn effect. In No. 2 the 3 upper parts are strengthened in the upper and the bass in the lower octave, the tone is clear, full and powerful. No. 3 is simple, and sounds soft and full. No. 4 is sharp and hard because of the 3 horns in *Bb*-alto; this would be improved if the 2nd and 3rd horns were in *F* or *C*. No. 5 is not of good effect since clarinet 2 is too little in the soprano and horn I in *F* too resonant. No. 6 is fresh and clear, as also is No. 7, which is improved by doubling the middle parts in the octave and by the added part. In No. 8 the alto (horn in *F*) is again in a prominent register, but here the effect is not bad since the soprano in 3-fold and sharp in tone.

Exercise IV. 9 Instruments.

„Allein Gott in der Höh' sei Ehr.“

*) The flute an octave higher lends brilliancy to the effect.

Ex. 1 is solemn and full because of the doubling of the middle and outer parts; the deep penetrating pitch of the 2nd oboe is covered by the clarinet 2, as also is oboe I by clarinet I. No. 2 is fuller not only because of the added part but also of the key and the position of the bass instruments. No. 3 is gay and powerful**) as is No. 4.

**) If this be given to a horn in *F* instead of in *C* the full tone is lost, as also it is if 1 horn in *C* were played by *F*-horn.

Ex. 1 can be arranged thus:

Soprano: flute and oboe; **Alto:** oboe II and clarinet II; **Tenor:** clarinet II and horn I; **Bass:** horn II, bassoons I and II; bassoon I in unison with horn II or in the lowe octave with bassoon II.

Exercise IV^o. 10 Instruments.

„Ach, bleib' mit deiner Gnade.“

Original.

N^o 1.

Flauti.

Oboi.

Clarineti in B \flat .

Fagotti.

Corno in E \flat .

N^o 2.

Flauti.

Oboi.

Clarineti in B \flat .

Fagotti.

Corno in E \flat .

N^o 3.

Flauti.

Oboi.

Clarineti in B \flat .

Fagotti.

Corno in E \flat .

N^o 4.

Flauti.

Oboi.

Clarineti in A.

Fagotti.

Corni in D.

Ex. 1 is quite simply arranged, all the parts except the soprano being doubled in unison. The alto is first doubled on the 2nd minim as the B \flat was not playable by the oboe II. The tone colour is powerful but dark. In No. 2 tenor and bass in unison, sopran and alt 3-fold in unison and octaves (flute II) an added part also occurs (bassoon D). Here the higher octave in alto is not too prominent because of the weak tone of the 2nd flute. This example is fuller than I. In No. 3 the parts are similarly doubled as in the 2 preceding examples, but the key position of the instruments (register) and the doubled bass lends a bright and powerful colour. No. 4 surpasses all the preceding in brilliancy and fullness since all parts are doubled. Examples may be worked with the following arrangement of instruments, the pupil himself choosing the instruments for the various parts.

- | | | | | |
|----------------|-------------------|-----------------------------|----------------------|----------------------|
| 1 small flute. | 1 large flute. | 1 large flute. | 2 large flutes. | 1 large flute. |
| 1 large flute. | 1 oboe. | 2 oboes. | 2 oboes. | 1 oboe. |
| 2 oboes. | 2 clarinets. | 2 clarinets. | 2 clarinets. | 2 clarinets. |
| 2 clarinets. | 2 bass clarinets. | 2 bassoons. | 4 horns (2 pitches.) | 1 bass-clarinet. |
| 2 bassoons. | 1 bassoon. | 3 horns (1, 2 or 3 pitches) | | 1 double bassoon. |
| 2 horns. | 2 horns. | | | 4 horns (2 pitches.) |

No remarks have been made as to the following exercises IV^b—IVⁿ, since the pupil should be able by now to help himself.

Exercise VI^h. 11 Instruments.

„Ich dank' dir, lieber Herre.“

Original.

N^o 1.

Flauti.

Oboi.

Clarineti in B \flat .

Fagotti.

Corni I. II. in F.

Corno III. in C.

- | | | | | |
|-----------------|------------------|----------------------------|----------------------------|----------------------------|
| 1 small flute. | 2 large flutes. | 2 large flutes. | 2 large flutes. | 1 small flute. |
| 2 large flutes. | 2 oboes. | 2 oboes. | 2 oboes. | 2 large flutes. |
| 2 oboes. | 1 english-horn. | 2 clarinets. | 2 clarinets. | 2 clarinets. |
| 2 clarinets. | 2 clarinets. | 1 bass-clarinet. | 1 bassoon. | 1 bass-clarinet. |
| 2 bassoons. | 1 bass-clarinet. | 1 double bassoon. | 4 horns(1,2 or 3 pitches). | 1 double bassoon. |
| 2 horns. | 1 bassoon. | 3 horns(1,2 or 3 pitches). | | 4 horns(1,2 or 3 pitches). |
| | 2 horns. | | | |

Exercise IVⁱ. 12 Instruments.

„Wie schön leuchtet der Morgenstern.“

Original.

- | | | | |
|-------------------|----------------------------|-------------------|----------------------------|
| 3 large flutes. | 2 large flutes. | 1 small flute. | 2 large flutes. |
| 2 oboes. | 2 oboes. | 2 large flutes. | 2 clarinets. |
| 1 english-horn. | 2 clarinets. | 2 oboes. | 1 bass-clarinet. |
| 2 clarinets. | 1 bass-clarinet. | 2 clarinets. | 2 bassoons. |
| 2 bassoons. | 2 bassoons. | 1 double bassoon. | 1 double bassoon. |
| 1 double bassoon. | 3 horns(1,2 or 3 pitches). | 4 horns. | 4 horns(1,2 or 3 pitches). |
| 2 horns. | | | |

*) In 1, 2 or 3 different pitches.
**) In 1, 2 or 3 different pitches.

Exercise IV^k.

13 Instruments.

„Sei Lob und Ehr' dem höchsten Gut.“

Original.

	No 1.		No 2.		No 3.
Flauti.		Flauti.		Flauti.	
Oboi.		Oboi.		Oboi.	
Clarineti in B \flat .		Clarineti in A.		Clarineti in A.	
Fagotti.		Fagotti.		Fagotti.	
Contrafag.		Contrafag.		Contrafag.	
Corni I. II. in A \flat .		Corni I. II. in D.		Corni I. II.* in D.	
Corni III. IV. in E \flat .		Corni III. IV. in D.		Corni III. IV. in G.	

*) Horns 1 and 2 could be written (in E \flat) thus 3 fold:

Exercise IV^l.

14 Instruments.

Werde munter mein Gemüthe.“

Original.

	No 1.		No 2.
Flauti.		Flauti.	
Oboi.		Oboi.	
Corno inglese.		Corno inglese.	
Clarineti in B \flat .		Clarineti in B \flat .	
Fagotti.		Fagotti.	
Contrafag.		Contrafag.	
Corni I. II. in F.		Corni I. II. in F.	
Cor. III. IV. in B \flat basso.		Corni III. IV. in B \flat basso.	

D. & F. 4

Exercise IV^m.

15 Instruments. umenten.

„Werde munter mein Gemüthe.“

Original.

	No 1.		No 2.		No 3.
Flauto piccolo.		Flauto piccolo.		Flauto piccolo.	
Flauti grand.		Flauti grand.		Flauti grand.	
Oboi.		Oboi.		Oboi.	
Clarineti in B \flat .		Clarineti in B \flat .		Clarineti in B \flat .	
Clarinetto basso in B \flat .		Clarinetto basso in B \flat .		Clarinetto basso in B \flat .	
Fagotti.		Fagotti.		Fagotti.	
Contrafag.		Contrafag.		Contrafag.	
Corni I. II. in F.		Corni I. II. in F.		Corni I. II. in F.	
Corni III. IV. in C.		Cor. III. IV. in B \flat basso.		Cor. III. IV. in B \flat basso.	

*) Flute II can play are octave lower to make the colour milder. die helle Klangfarbe des eine Octave höher liegenden Sopran gemildert wird.

Exercise IVⁿ.

16 Instruments.

Original.

„Wie schön leuchtet der Morgenstern.“

	No 1.		No 2.
Flauto piccolo.		Flauto piccolo.	
Flauti grand.		Flauti grand.	
Oboi.		Oboi.	
Corno inglese.		Corno inglese.	
Clarineti in B \flat .		Clarineti in B \flat .	
Clarinetto basso in B \flat .		Clarinetto basso in B \flat .	
Fagotti.		Fagotti.	
Contrafag.		Contrafag.	
Corni I. II. in E \flat .		Corni I. II. in A \flat .	
Corni III. IV. in E \flat .		Corni III. IV. in E \flat .	

*) Flute II can play are octave lower to make the colour milder. D. & F. 4

These should be worked with similar disposition of instruments as that suggested at the end of IV^s.

Score Examples.

The following examples show the use made by the great masters and combination of the wood-wind and horns in great variety.

1. Weber, „Freischütz.“ N° 14. „Wir winden dir.“
Andante quasi Allegretto.

Musical score for Example 1, featuring Oboi, Violini, Corni in C, and Viola. Cb. The tempo is Andante quasi Allegretto. The score shows a woodwind and string ensemble with dynamic markings like *p*.

2. Weber, „Concerto for clarinet.“ F-mi. Mov. II.
Adagio ma non troppo.

Musical score for Example 2, featuring Clarinetto solo in B \flat , Corni I. in E \flat , and Corno II. III. in E \flat . The tempo is Adagio ma non troppo. The score includes dynamic markings like *p* and *pp*, and the instruction "con sordino".

Continuation of the musical score for Example 2, showing further woodwind and string parts with dynamic markings like *pp* and *pizz.*

4. Weber, „Freischütz.“ 2 trio with Chor.
Allegro moderato.

Musical score for Example 4, featuring Fagotti, Corni in C, Tenor I. II., and Bass I. II. The tempo is Allegro moderato. The score includes dynamic markings like *p* and *a²*. The lyrics are: "O lass Hoffnung dich be - le - ben, und ver - traue - ver - traue dem Geschick."

3. R. Wagner, „Die Meistersinger.“
Mässig. Act I. Scene I.

Musical score for Example 3, featuring Oboe I., Fagotti, and Corno Lin F. The tempo is Mässig. The score includes dynamic markings like *mf* and *p*.

5. Weber, „Oberon.“ Song: „Wann musst du schlafen.“
Andante. End.

Musical score for Example 5, featuring Clarinetti in A, Fagotto I., Fagotto II., and Corno I in E. The tempo is Andante. The score includes dynamic markings like *p* and ends with "End."

6. R. Wagner. „Tannhäuser.“
(Part. p. 15.)

Corno inglese.

Fagotti I.II.

Fagotto III.

Corno IV. in D.

7. Adam. „Postillon von Lonjumeau“ N° 1.
Allegro non troppo.

Oboi.

Fagotti.

Corno in B♭ basso.

8. Adam. „Postillon von Lonjumeau.“
Allegro.

Flauto I.

Clarinet. I. in B♭.

Fagotti.

Cor. III. IV. in B♭ basso.

9. Goldmark. Overture „Sakuntala.“
Andante assai.

Oboe I.

Clarineti in B♭.

Fagotti.

Corni I. II. III. in F.

10. Cherubini. Overture „Anacreon.“
Largo assai.

Flauto I.

Oboe I.

Clarinetto I. in C.

Fagotti.

Corni in D.

11. Beethoven. „Symphony D-mi. No. 9.“ Mov. III.
Presto.

Oboe I.

Clarineti in C.

Fagotti.

Corni I. II. in D.

Corno II.

12. Beethoven. Aria and Chor „Ruins of Athens.“

Adagio.

Fagotti. *fp*

Corni I.II. in F. *fp*

Corni III.IV. in C. *fp*

13. R. Schumann. Overture „Manfred.“

Flauto I. *p dolce*

Oboe I. *p*

Clarineti in B \flat . *p*

Corno in E \flat . *p*

14. R. Wagner. Overture „Tannhäuser.“ (By permission of Adolph Fürstner, Berlin.)

Andante maestoso.

Clarineti in A. *p*

Fagotti. *p*

Corni in E. *p*

15. R. Wagner. „Die Meistersinger.“ Act I. Scene I.

Mässig.

Clarineti in B \flat . *p*

Fagotto I. *p*

Corno I. in F. *p*

Corno IV. in C. *p*

16. R. Wagner. „Walküre.“ (Part. p. 15.)

Sehr langsam.

Clarineti in A. *p*

Fagotti. *p*

Corni in E. *p*

17. R. Wagner. „Götterdämmerung.“ (Part. p. 50.)

Oboi. *p*

Clarineti in B \flat . *fp*

Fagotti. *p*

Corni in F. *mf*

Brünhilde. *mf*

18. Haydn „Symphony in G.“

(Peters Part. Ed. No. 4. Mov. I.)

Adagio cantabile.

Oboi. *p*

Fagotti. *p*

Corni in G. *p*

Clarineti in B \flat . *p dolce*

Fagotti. *p dolce*

Corno in E \flat . *p*

19. Beethoven. „Fidelio.“ (Act II.)

Adagio cantabile.

Clarineti in B \flat . *p dolce*

Fagotti. *p dolce*

Corno in E \flat . *p*

Brünhilde. *p*

nicht mehrschwingt es sich muthig des Weg's.

D. & F. 4

20. Mozart. „Die Zauberflöte.“ (Finale.)

Andante.

Clarineti in B \flat .

Fagotti.

Corno in E \flat .

sotto voce

p

a²

fp

f

p

21. Beethoven. Overture „The Ruins of Athens.“

Marcia moderato.

Oboi.

Fagotti.

Corni in G.

p dol.

Strech.

p dolce

p dolce

rit.

22. Beethoven. „Symphony in D-ma. No. 2.“

Allegro. Scherzo.

Oboi.

Fagotti.

Corni in D.

p

p₁

p

sf > p

sf > p

sf > p

23. Beethoven. Music to „Egmont.“

Larghetto.

Oboi.

Clarineti in B \flat .

Fagotti.

Corni in D.

p

p

sf

sf

sf

p

24. Weber. „Concerto for clarinet.“

Allegretto.

Clarinetto solo in B \flat .

Oboi.

Fagotti.

Corni in F.

p

pp

pp

pp

Str.

25. R. Schumann. „Symphony in B-ma. No. 1. (Mov. IV.)

Andante.

Flauto I.

Clarintti in B \flat .

Fagotti.

Corni in F.

Solo.

Cadenza

a tempo

rit.

p

rit. p

cresc.

sf dim.

D. & F. 4

26. Beethoven., „Symphony B-ma. No. 4.“ Mov. III. Trio.
Un poco meno mosso.

Oboe I. *p dolce* *cresc.* *cresc.* *sf* *p* V.I. V.III. Viola.

Clarineti in B \flat . *p dolce* *cresc.* *cresc.* *sf* *p*

Fagotti. *p dolce* *cresc.* *sf* *p*

Corno in B \flat basso. *p dolce* *cresc.* *sf* *p*

27. R. Wagner. „Siegfried - Idyll.“ (By permission of Schott's Söhne, Mainz.)
Allegretto mosso.

Flauto I. *p* *cresc.*

Oboe I. *p* *mf*

Clarineti in B \flat . *p* *cresc.* *pp* *cresc.*

Fagotto I. *p* *cresc.* *cresc.* *pp* *pp* *cresc.* *cresc.*

Corni in F. *p* *cresc.* *cresc.* *pp* *pp* *cresc.* *cresc.*

cresc. *p* *ppresc.* *ppresc.*

poco cresc. *p* *ppresc.* *ppresc.*

p *ppresc.* *ppresc.* *ppresc.*

28. Beethoven., „Symphony E \flat -ma. No. 3.“ (Mov. IV.)
Poco Andante.

Oboe I. *p con espressione sf* *cresc.* *sf* *p* Violini.

Clarineti in B \flat . *p* *sf* *p*

Fagotti. *p* *sf* *sf* *p*

Corni I, II. in E \flat . *p*

Corno III. in E \flat . *p*

29. Fr. Schubert., „Symphony C-dur.“
Allegro vivace. Scherzo.

Oboi. *p* *sf*

Clarineti in C. *p* *sf*

Fagotti. *p* *sf*

Corni in C. *p* *sf*

30. Weber, „Preciosa.“ Act II. No. 5. Chor.
Moderato.

Clarineti in A.

Fagotti.

Corni I-IV in E.
(behind the scenes as Echo.)

Corni I-IV in E.

Sopran. Alt.

Tenor. Bass.

Im Wald! im Wald, im frischengrünen Wald, im Wald! wo's E-choschallt! im Wald wo's E-choschallt.

31. Spohr. Overture to Op. „Jessonda.“
Moderato. Einleitung.

Flauti.

Oboi.

Clarineti in A.

Fagotti.

Corno in E♭.

Viol. I. II.

Viola.

pizz.

32. Mendelssohn. Scherzo from „A Midsummer Night's Dream.“
Allegro vivace.

Flauti.

Oboi.

Clarineti in B♭.

Fagotti.

Corni in D.

a2

33. Mendelssohn. Ov. „A Midsummer Night's Dream.“
Allegro di molto.

Flauti.

Clarineti in A.

Fagotti.

Corni in E.

pp

34. R. Wagner, „Tannhäuser.“ (Pt. p. 105.)
(Auf dem Theater, entfernt.)

Flauti.

Clarineti in C.

Fagotti.

Corni in C.

p

35. R. Wagner, „Tannhäuser.“ (Part. p. 371.)

Oboe I.

Clarineti in B.

Fagotti.

Corni I. II. in F.

Corno III. in E♭.

p cresc.

cresc.

a2

p cresc.

cresc.

cresc.

cresc.

p

D. & F. 4

36. R. Wagner, „Siegfried.“ (Part. p. 330)

Clarinet. I. in B \flat .
 Fagotti I. II.
 Fagotto III.
 Corni I. II. in F.
 Corno III. in F.
 Corno IV. in B and B \flat .

37. R. Wagner, „Lohengrin.“ 3. Scene. (Part. p. 79.) (By permission of Breitkopf & Härtel, Leipzig.)

Oboi.
 Clarineti in B \flat .
 Fagotto I.
 Fagotti II. III.
 Corni I. II. in F.
 Corni III. IV. in D.
 Herald.

3 Tromp.
 Tromb. II.
 3 Tromb.
 Tuba.
 2 Lohengrina. Friedr.

Gott rich-tet euch nach Recht und Fug, so trau-et ihm, nicht eu-rer Kraft! Gott rich-te

38. R. Wagner, „Tristan und Isolde.“ (Part. p. 293.) (By permission of Breitkopf & Härtel, Leipzig.)

Flauto I.
 Oboi.
 Corno inglese.
 Clarineti in B \flat .
 Fagotti.
 Corni III. IV. in E.
 Tristan.

Langsam.
 Marke.
 kund

O Kö-nig, das kann ich dir nicht sa-gen; und was du fragst,

D. & F. 4

pp *p* *mf* *dim.* *Violini.*

pp *p* *espress.* *f* *p* *p* *mf dim.* *p*

pp *mf* *p* *p* *mf* *più p*

pp *mf* *più p*

(Er wendet sich zu Isolde, die sehnsüchtig zu ihm aufblickt.)

daskannst du nie er-fahren.

39. Mendelssohn. Op. 52. „Hymn of praise.“
 Molto più moderato ma con fuoco.

Flauti. Viol.

Oboi.

Clarinetti in B \flat .

Fagotti. Vel. u. Cb.

Corno in E \flat .

Soprano solo.

pp *p*

Lo-be den Herrn, mei-ne See-le, und was in mir ist seinen hei-li-gen Na-men.

40. R. Wagner. „Götterdämmerung. (Part. p. 203.)

Oboi.

Corno inglese.

Clarinetti in B \flat .

Fagotti.

Corni in E.

Brunnhilde.

ff *p* *ff* *p* *ff* *dim.* *f* *ff* *dim.*

ist? Wiekannst du's fas-sen, fühl - - - lo - se Maid!

D. & F. 4

41. Giuseppe Verdi. „Othello.“ (Act IV. Pag. 321.)

Flauti.
Oboe I.
Clarineti in A.
Fagotti.
Corni in E.

Cf. Brahms violin concerto II — first 29 bars; 2 flutes, 1 oboe, 2 clarinets, 2 bassoons, 1 horn.

42. Beethoven. March and Chor. from „Ruins of Athens.“
Assai moderato.

Flauto I.
Oboi.
Clarineti in B♭.
Fagotti.
Corno in E♭.

43. Beethoven March and Chor. from „Ruins of Athens.“
Assai moderato. (On the stage.)

Flauto I.
Oboi.
Clarineti in B♭.
Fagotti.
Corno in E♭.

44. R. Wagner. „Die Meistersinger.“ Act III.
Mässiges Walzer-Zeitmass.

Flauto I.
Oboi.
Clarinetti in B \flat .
Fagotti.
Corni I, II in F.
Corni III, IV in F.

45. Schubert. „Symphony C-ma.“

Allegro.

Flauti.
Oboi.
Clarinetti in C.
Fagotti.
Corni in C.

46. Mendelssohn. Ov. „A Midsummer Night's Dream.“

Flauti.
Oboi.
Clarinetti in A.
Fagotti.
Corni I in E.
Corni II in E.

47. Rob. Volkmann. „Symphony B-ma No. 2.“ (Part. p. 30-31.)

Flauti.
Oboi.
Clarinetti in B \flat .
Fagotti.
Corni in F.

*) By permission of Schott's Söhne, Mainz.

48. Spohr. Overture to „Jessonda.“

Moderato.

Flauti piccolo in D \flat .
Oboi.
Clarinetti in A.
Fagotti.
Corno in E \flat .
Timpani in E \flat and B \flat .

*) Cf. Timpani part VI,

49. R. Wagner., Die Meistersinger von Nürnberg. Prel. Act I.
Im mässigen Zeitmass.

Flauto I.
Flauto II.
Oboi.
Clarineti in B \flat .
Fagotti.
Corni in F.

50. Mendelssohn, Op. 52. „Lobgesang.“
Adagio religioso.

Flauti.
Oboi.
Clarineti in A.
Fagotti.
Corni I, II. in A.
Corni III, IV. in D.
Viol. I.
Viol. II.
Viola.
Vel. u. Cb.

Langsam und feierlich

Flauto I.
Flauti II. III.
Oboi.
Corno inglese.
Clarinti in B \flat .
Clarinetto basso in B \flat .
Fagotto I.
Fagotti II. III.
Corni I. II. in E \flat .
Cor. III. IV. in B \flat basso.

p p cresc. f p
cresc. f p dim.
cresc. mf dim. p p
cresc. cresc. mf dim. p p
p cresc. cresc. mf dim. mf dim. p

Musical score for the first system, featuring vocal lines and piano accompaniment. The score includes vocal staves with lyrics and piano accompaniment staves. Dynamics include *p* and *mp*.

52. R. Wagner.
 „Die Meistersinger.“ Act III. *)
 Mässig langsam.

Musical score for the second system, featuring woodwind and string parts. The score includes staves for Oboi, Clarinetti in Bb, Fagotti, Corni I. II. in F, Corni III. IV. in F, Arpa, and Walther. Dynamics include *pp dolce* and *p*. The Walther part includes the lyrics: *Wonnig ent-ra-gend dem se-ligen*.

Musical score for the third system, featuring vocal lines and piano accompaniment. The score includes vocal staves with lyrics and piano accompaniment staves. Dynamics include *p cresc.*, *dim.*, *f*, *p*, *cresc.*, and *più f*.

Raum, bot gold'ner Frucht heil'saft'ge Wucht mit holdem Prangen den Ver-langen an duft'ger Zwei-ge Saum herrliche in Baum.

*) By permission of Breitkopf & Härtel, Leipzig. 1, Leipzig. D. s. F. 4

Exercise V.

Arrange songs for voice, with accompaniment for wood-wind and horns — which should not prove difficult if the previous exercises have been worked. The horns will be used here chiefly for added free and for the middle parts; but they may also be used in other manners.

The following list may be useful:

- | | | |
|----------------|---------------------|--------------------------------------------------------------------------------------------------|
| 4 instruments. | Mendelssohn | 'Lieblingsplätzchen'. Voice, 2 clarinets and 2 horns. |
| 5 " | " | 'Frage'. Voice, 2 clarinets, 2 bassoons and 1 horn. |
| 6 " | " | 'Minnelied'. Voice, 2 clarinets, 2 bassoons and 2 horns. |
| 7 " | " | 'Wenn durch die Piazzetta'. Voice, 2 clarinets, 2 bassoons and 3 horns. |
| 7 " | Schubert. | 'Baches Wiegenlied'. Voice, 3 bassoons and 4 horns. |
| 7 " | " | 'Wanderers Nachtlid'. Voice, 1 oboe, 2 clarinets, 2 bassoons and 2 horns. |
| 8 " | " | 'Das Wirthshaus'. Voice, 1 flute, 1 oboe, 2 clarinets, 2 bassoons and 2 horns. |
| 8 " | " | 'Horch, horch!' Voice, 2 flutes, 2 oboes, 2 bassoons and 2 horns. |
| 9 " | Mozart. | 'Das Veilchen'. Voice, 1 flute, 2 oboes, 2 clarinets, 2 bassoons and 2 horns. |
| 9 " | Mendelssohn. | 'Auf Flügeln des Gesanges'. Voice, 2 flutes, 2 clarinets, 2 bassoons and 3—4 horns. |
| 9 " | Mozart. | 'Einsam ging ich'. Voice, 1 flute, 1 oboe, 2 clarinets, 1 bass-clarinet, 2 bassoons and 2 horns. |
| 10 " | " | 'An Chloe'. Voice, 2 flutes, 1 oboe, 2 clarinets, 2 bassoons and 2 horns. |

For practice in reading from score the following will be useful:

- | | |
|---------------------------------------|----------------------------------------------------------------------------------------------------------|
| Mozart, (Köchel list No. 213.) | Divertimento for 2 oboes, 2 bassoons and 2 horns, <i>F.</i> $\frac{4}{4}$. |
| " " " " 240.) | " " " " " " " " <i>B.</i> $\frac{3}{4}$. |
| " " " " 252.) | " " " " " " " " <i>E.</i> $\frac{6}{8}$. |
| " " " " 253.) | " " " " " " " " <i>F.</i> $\frac{2}{4}$. |
| " " " " 270.) | " " " " " " " " <i>B.</i> $\frac{4}{4}$. |
| " " " " 375.) | Serenata for 2 oboes, 2 clarinets, 2 bassoons and 2 horns. <i>E.</i> $\frac{4}{4}$. |
| " " " " 388.) | " " " " " " " " <i>C.</i> $\frac{4}{4}$. |
| " " " " 186.) | Divertimento for 2 oboes, 2 english-horn, 2 clarinets and 2 horns. <i>B.</i> $\frac{3}{4}$. |
| " " " " 289.) | Divertimento for 2 oboes, 2 bassoons and 2 horns. <i>E.</i> $\frac{3}{4}$. |
| " " " " 166.) | Divertimento for 2 oboes, 2 english-horn, 2 clarinets, 2 bassoons and 2 horns. <i>E.</i> $\frac{4}{4}$. |
| Beethoven, op. 103. | Octett for 2 oboes, 2 clarinets, 2 bassoons and 2 horns. <i>E.</i> |
| " | Rondino for 2 oboes, 2 clarinets, 2 bassoons and 2 horns. <i>E.</i> |
| " | Op. 71. Sextett for 2 clarinets, 2 bassoons and 2 horns. <i>E.</i> |
| Th. Gouvy, Op. 71. | Octett for 1 flute, 1 oboe, 2 clarinets, 2 bassoons and 2 horns. |
| Carl Reinecke, Op. 216. | Octett for 1 flute, 1 oboe, 2 clarinets, 2 bassoons and 2 horns. |
| Joachim Raff, Op. 188. | Sinfonietta for 2 flutes, 2 oboes, 2 clarinets, 2 bassoons and 2 horns. |
| Mozart, (Köchel list No. 361.) | Serenata for 2 ob., 2 clar., 2 bassethorns, 2 bassoons, 4 waldhorns and double bassoons. |

Exercise VI.

Arrange some pieces for wood-wind and horns, which may of course be transposed from the original keys to suit better the instruments for which they are arranged. The choice of such pieces is limited in so far that comparatively few pieces are suitable for such a combination. The choice of instruments must depend upon the character of the piece selected. They may be arranged thus:

- | | |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exercise a. Piece for 4 instruments: | { 2 clarinets, 2 horns.
2 oboes, 2 horns. |
| Exercise b. Piece for 5 instruments: | { 1 flutes, 2 clarinets, 2 horns.
2 clarinets, 2 bassoons, 1 horn. |
| Exercise c. Piece for 6 instruments: | { 1 flute, 1 oboe, 2 clarinets, 2 horns.
1 flute, 2 clarinets, 2 bassoons, 1 horn. |
| Exercise d. Piece for 7 instruments: | { 1 flute, 2 clarinets, 1 bassoon, 2 horns.
1 oboe, 2 clarinets, 2 bassoons, 1 horn. |
| Exercise e. Piece for 8 instruments: | { 1 flute, 1 oboe, 2 clarinets, 2 bassoons, 2 horns.
2 flutes, 2 oboes, 2 bassoons, 2 horns. |
| Exercise f. Piece for 9 instruments: | { 1 flute, 2 oboes, 2 clarinets, 2 bassoons, 2 horns.
1 flute, 1 oboe, 2 clarinets, 2 bassoons, 3 horns.
2 flutes, 2 clarinets, 2 bassoons, 3 horns. |
| Exercise g. Piece for 10 instruments: | { 1 flute, 2 oboes, 2 clarinets, 2 bassoons, 2 horns.
2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 3 horns.
1 flute, 1 oboe, 2 clarinets, 2 bassoons, 3 horns. |
| Exercise h. Piece for 11 instruments: | { 1 small fl., 2 large fl., 2 clarinets, 2 bassoons, 4 horns.
2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 3 horns.
1 flute, 2 oboes, 2 clarinets, 2 bassoons, 4 horns. |
| Exercise i. Piece for 12 instruments: | { 1 small fl., 2 large fl., 1 oboe, 2 clar., 2 bassoon, 1 doub ^l bas., 2 horns.
2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 4 horns.
2 flutes, 2 ob., 1 english-horn, 2 clar., 2 bassoons, 1 double bassoon, 2 horns.
2 flutes, 2 oboes, 2 clarinets, 1 bass-clarinet, 2 bassoons, 3 horns. |

The pupil may please himself as to the arrangement of pieces for more than these twelve instruments. The following arrangements may serve to explain how the above suggestions may be carried out.

1. Beethoven „Schmerzens Walzer.“

Part I. Part II.

Original. F#-minor.

Pianoforte.

pp cresc. p

Takt. 1 2 3 4 9 10 11 12

Flauti.

Oboi.

Clarineti in Bb.

Fagotti.

*) Corno in Eb.

Part III. Part IV.

f p

17 18 19 20 29 30 31 32

f p

a2 p

f p

a2 p

f p

*) It were better here to place the horns between the clarinets and bassoons.

Part V.

Musical notation for Part V, measures 37-44. The score is written for a grand piano with a treble and bass clef. The key signature has one flat. The music features a complex texture with multiple voices. Dynamics include *p* and *mf*. A fermata is present over measure 43.

37 38 39 40 41 42 43 44

Musical notation for Part V, measures 45-52. The score continues with a grand piano. Dynamics include *p* and *mf*. The texture remains complex with multiple voices.

Part VI.

Musical notation for Part VI, measures 45-52. The score is written for a grand piano with a treble and bass clef. The key signature has two flats. The music features a complex texture with multiple voices. Dynamics include *pp*, *cresc.*, and *f*.

45 46 47 48 49 50 51 52

Musical notation for Part VI, measures 45-52. The score continues with a grand piano. Dynamics include *pp*, *cresc.*, and *f*. The texture remains complex with multiple voices.

3. A. Jensen. Op. 17. Wanderbilder. Heft I., „Morgengruss.“(*)

Original.
Pianoforte.

Flauto I.
Oboi.
Clarinetti in B7.
Fagotti
Contrafagotto.
Corni in F.

f *mf*
Red. * Red. * Red. * Red. *

*) By permission of C. F. Peters, Leipzig.

The musical score is arranged in three systems. The first system features piano accompaniment with dynamics *f* and *mf*, and vocal lines. The second system continues the piano accompaniment with dynamics *f* and *p*. The third system shows piano accompaniment with dynamics *f* and *p*. The score includes various musical notations such as notes, rests, and dynamic markings.

These pieces may be so arranged:

Mendelssohn, 'Songs without words' No. 27.

Kullak, op. 67. 'Abendfriede'.

Schumann, 'Album for the Young' Harvest song.

Kuhlau, op. 88 No. 2. Andante.

" op. 55 No. 4. 2nd movement.

" op. 88 No. 3. 2nd movement.